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PLAY BACK APPARATUS

[FIG. 1]

- 1: OPERATION SECTION
- 2: CONTROL SECTION
- 3: BUFFER MEMORY
- 4: COMPRESSION DECODER
- 5: DATA EXTRACTION CIRCUIT
- 6: RAM
- 7: DATA CORRECTION CIRCUIT
- 8: SWITCHING SW
- 9: D/A
- 10: AMP
- 11: SP
- 12: ADDRESS CONTROL SIGNAL GENERATOR
- M: SOLID STATE MEMORY
- A: COMPRESSION BIT STREAM DATA
- B: PCM AUDIO DATA (16 BITS)
- C: SPECIAL AUDIO DATA (16 BITS)
- D: BIT NUMBER CONVERSION DATA (8 BITS)
- E: TEMPORARILY STORED DATA (8 BITS)
- F: OUTPUT DATA (8 BITS)
- G: ANALOG AUDIO SIGNAL

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[FIG. 2]

21: BIT STREAM ANALYZER
22: MDCT COEFFICIENT INVERSE QUANTIZATION
23: GAIN DECODE
24; SPECTRUM ENVELOPE PLAY BACK
25: INVERSE MDCT
26: MDCT COEFFICIENT INVERSE NORMALIZATION
A: COMPRESSION BIT STREAM DATA INPUT
B: MDCT COEFFICIENT QUANTIZATION INDEX
C: GAIN QUANTIZATION INDEX
D: SPECTRUM ENVELOPE QUANTIZATION PARAMETER
E: WINDOW INFORMATION
F: PCM AUDIO DATA OUTPUT

[FIG. 3]

A: RAM ADDRESS SPACE

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[FIG. 4]

- 2: CONTROL SECTION
- 4: COMPRESSION DECODER
- 5: DATA EXTRACTION CIRCUIT
- 6: RAM
- 7: DATA CORRECTION CIRCUIT
- 8: SWITCHING SW
- 12: ADDRESS CONTROL SIGNAL GENERATOR
- A: FROM BUFFER MEMORY 3
- B: PCM AUDIO DATA (16 BITS)
- C: BIT NUMBER CONVERSION DATA (8 BITS)
- D: TEMPORARILY STORED DATA (8 BITS)
- E: SPECIAL AUDIO DATA (16 BITS)
- F: OUTPUT DATA (8 BITS)
- G: TO D/A CONVERTER 9

[FIG. 5]

- A: PCM CLOCK
- B: BIT NUMBER CONVERSION DATA
- C: WE SIGNAL
- D: ADR SIGNAL (AT THE TIME OF DATA WRITING)

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[FIG. 6]

A: PCM CLOCK
B: ADR SIGNAL (AT THE TIME OF DATA READING)
C: RE SIGNAL
D: OUTPUT DATA

[FIG. 7]

A: PCM CLOCK
B: ADR SIGNAL (AT THE TIME OF DATA READING)
C: RE SIGNAL
D: OUTPUT DATA

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[FIG. 8]

- S1: TEMPORARILY STORED DATA EXISTS IN RAM 6 ?
- S2: READ OUT DATA OF FIXED MEMORY AND STORE AND HOLD TEMPORARILY
STORED DATA IN RAM 6
- S3: PLAY BACK COMMAND IS GIVEN ?
- S4: SELECT DATA READING OUT START POSITION
- S5: START DATA PLAY BACK FROM READING OUT START POSITION
- S6: PLAY BACK STOP COMMAND IS GIVEN ?
- S7: FF COMMAND IS GIVEN ?
- S8: REW COMMAND IS GIVEN ?
- S9: DATA IS COMPLETED ?
- A: FROM FF PROCESSING ROUTINE
- B: FROM REW PROCESSING ROUTINE
- C: TO FF PROCESSING ROUTINE
- D: TO REW PROCESSING ROUTINE

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[FIG. 9]

A: FF PROCESSING START

B: FF PROCESSING END RETURN

S11: OUTPUT STOP FROM COMPRESSION DECODER 4

S12: READING OUT OPERATION OF TEMPORARILY STORED DATA OF RAM

6

S13: SWITCH SWITCHING SW 8 TO OUTPUT SIDE OF DATA CORRECTION
CIRCUIT 7

S14: FF COMMAND IS RELEASED ?

S15: CALCULATE DATA READING OUT START POSITION X1

S16: RESTART OF OUTPUT FROM COMPRESSION DECODER 4

S17: WRITING OPERATION OF TEMPORARILY STORED DATA OF RAM 6

S18: SWITCH SWITCHING SW 8 TO OUTPUT SIDE OF COMPRESSION DECODER

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[FIG. 10]

A: REW PROCESSING START

B: REW PROCESSING END RETURN

S21: OUTPUT STOP FROM COMPRESSION DECODER 4

S22: READING OUT OPERATION OF TEMPORARILY STORED DATA OF RAM

6

S23: SWITCH SWITCHING SW 8 TO OUTPUT SIDE OF DATA CORRECTION
CIRCUIT 7

S24: REW COMMAND IS RELEASED ?

S25: CALCULATE DATA READING OUT START POSITION X2

S26: RELEASE STORE AND HOLDING TEMPORARILY STORED DATA OF RAM

6

S27: RESTART OF OUTPUT FROM COMPRESSION DECODER 4

S28: SWITCH SWITCHING SW 8 TO OUTPUT SIDE OF COMPRESSION DECODER

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[FIG. 11]

- 1: OPERATION SECTION
- 3: BUFFER MEMORY
- 4: COMPRESSION DECODER
- 5: DATA EXTRACTION CIRCUIT
- 6: RAM
- 7: DATA CORRECTION CIRCUIT
- 8: SWITCHING SW
- 9: D/A
- 10: AMP
- 11: SP
- 12: ADDRESS CONTROL SIGNAL GENERATOR
- 14: CONTROL SECTION
- M: SOLID STATE MEMORY
- A: COMPRESSION BIT STREAM DATA
- B: PCM AUDIO DATA (16 BITS)
- C: SPECIAL AUDIO DATA (16 BITS)
- D: BIT NUMBER CONVERSION DATA (8 BITS)
- E: TEMPORARILY STORED DATA (8 BITS)
- F: OUTPUT DATA (8 BITS)
- G: ANALOG AUDIO SIGNAL
- H: DEFAULT DATA (8 BITS)

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[FIG. 12]

- S1: TEMPORARILY STORED DATA EXISTS IN RAM 6 ?
- S32: READ OUT DEFAULT DATA OF ROM 13 AND STORE AND HOLD
TEMPORARILY STORED DATA
- S3: PLAY BACK COMMAND IS GIVEN ?
- S4: SELECT DATA READING OUT START POSITION
- S5: START DATA PLAY BACK FROM READING OUT START POSITION
- S6: PLAY BACK STOP COMMAND IS GIVEN ?
- S7: FF COMMAND IS GIVEN ?
- S8: REW COMMAND IS GIVEN ?
- S9: DATA IS COMPLETED ?
- A: FROM FF PROCESSING ROUTINE
- B: FROM REW PROCESSING ROUTINE
- C: TO FF PROCESSING ROUTINE
- D: TO REW PROCESSING ROUTINE

[illegible]

- ```
A: FRAME (N - 1)
B: FRAME (N)
C: FRAME (N + 1)
D: HEADER
E: WINDOW INFORMATION, ETC.
F: SPECTRUM ENVELOPE/GAIN QUANTIZATION PARAMETER
G: MDCT COEFFICIENT QUANTIZATION INDEX
```

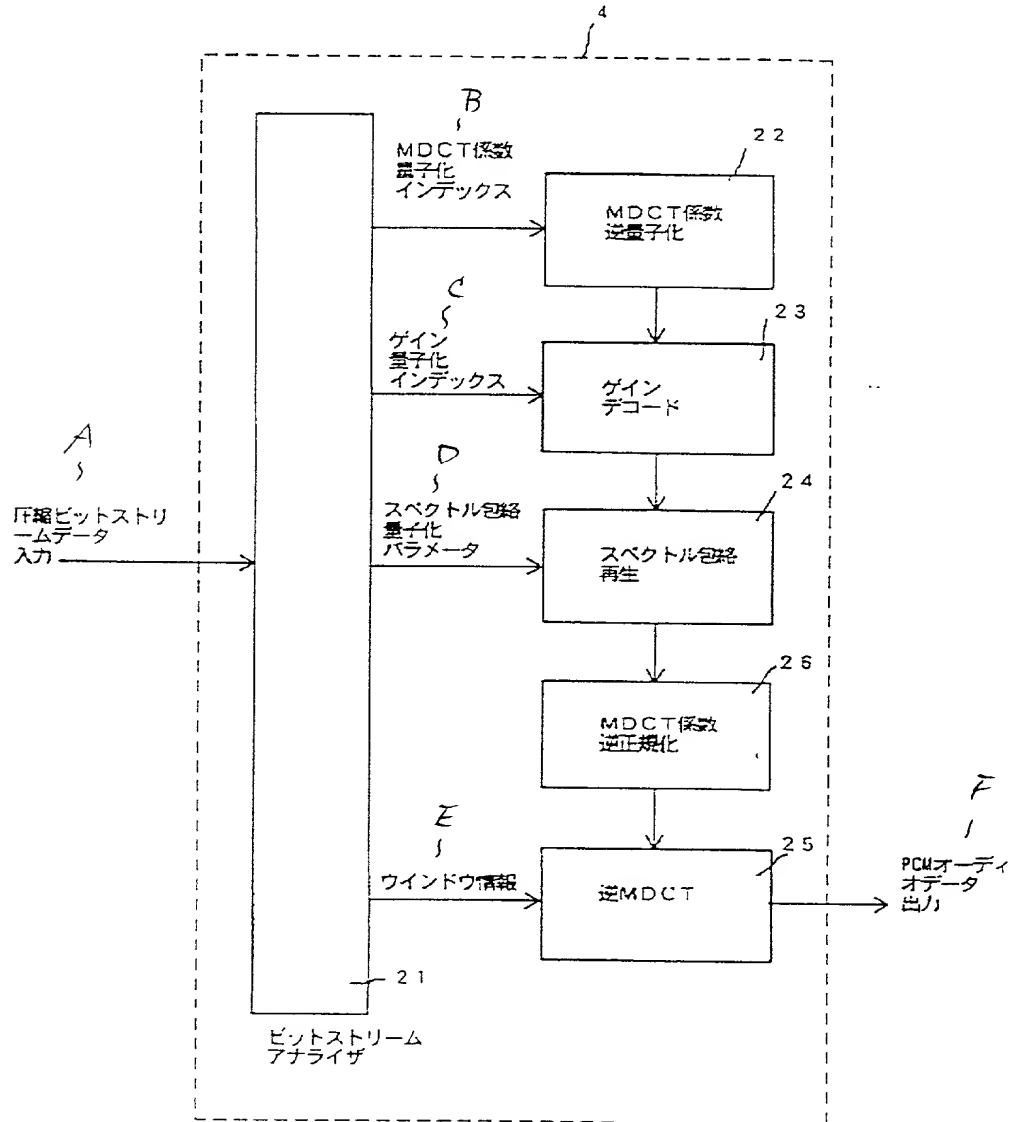


【図2】

Q64051

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Fig. 2





〔図4〕

Q64051

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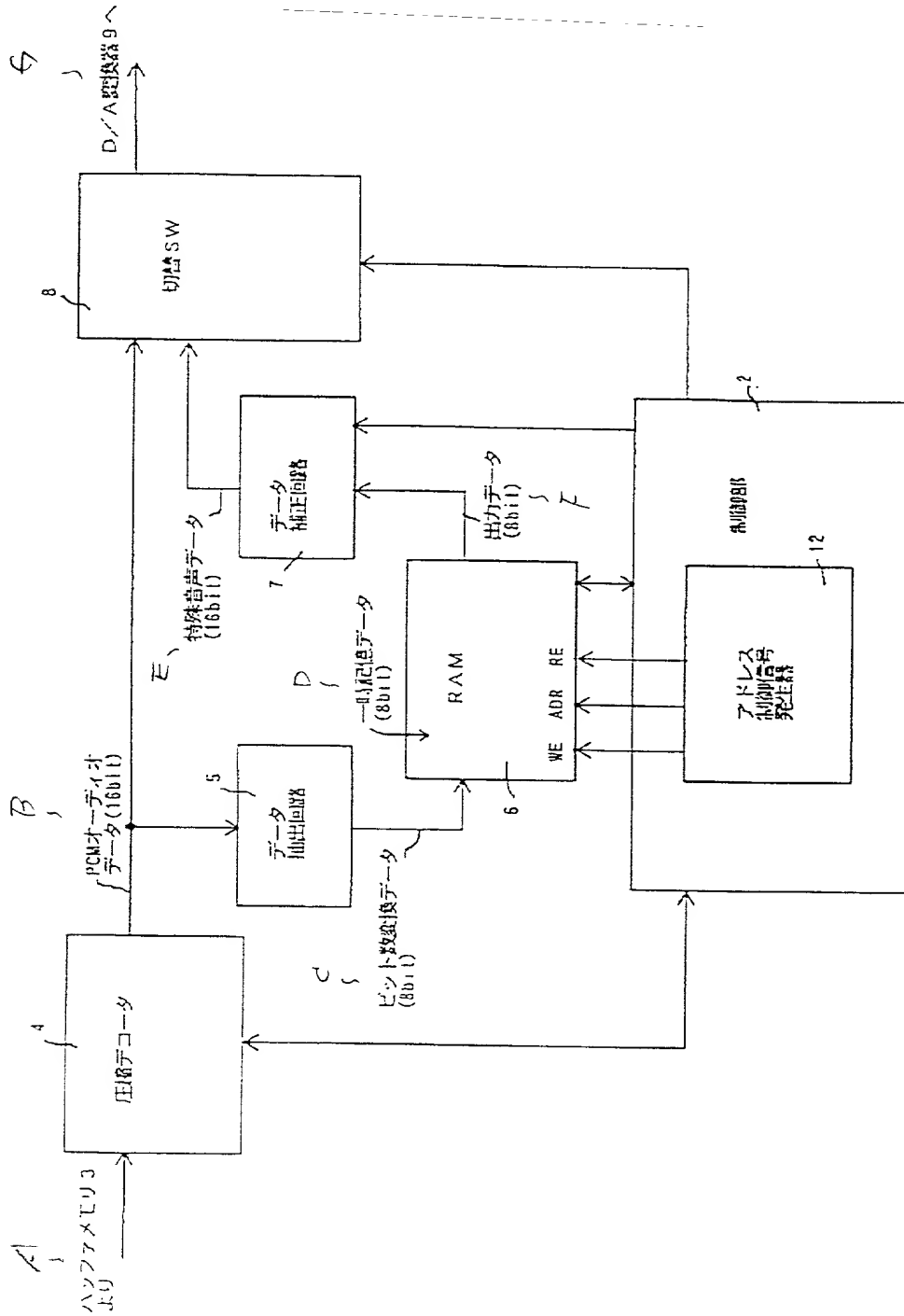
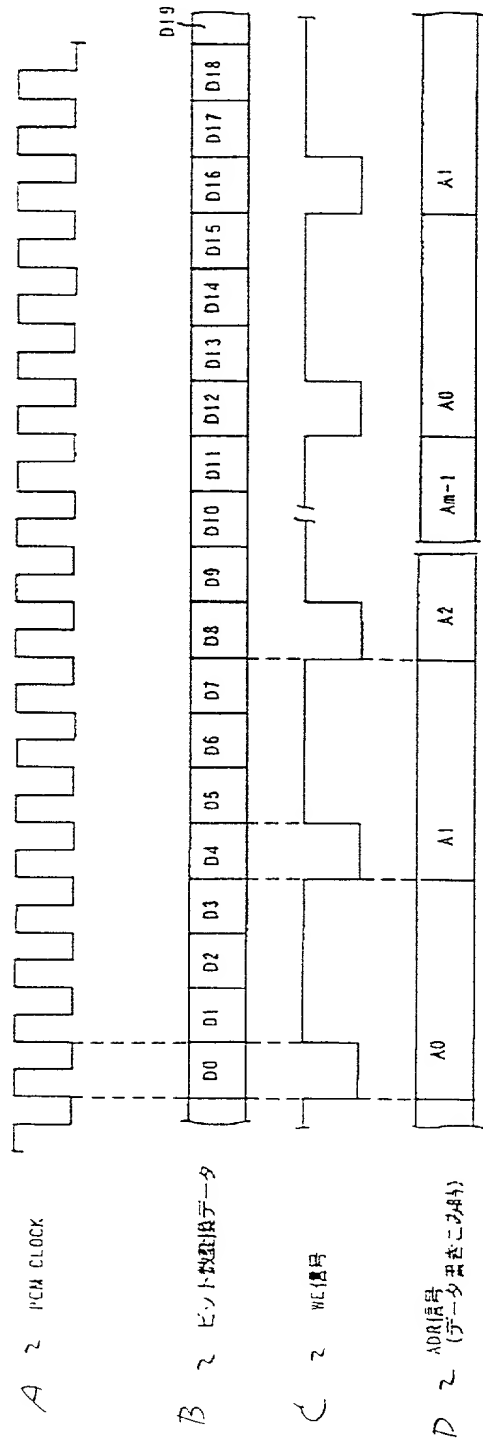


Fig. 4

【図5】

Fig. 5



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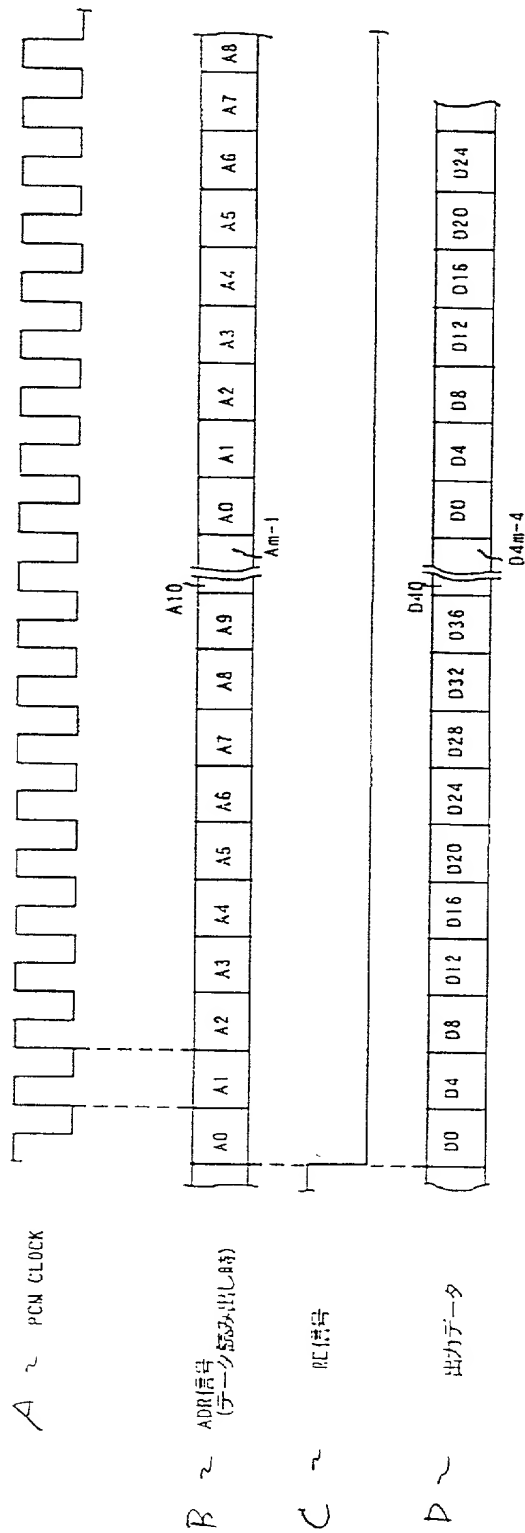
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 764 頁: 6/ 13

整理番号=54P03

【図6】

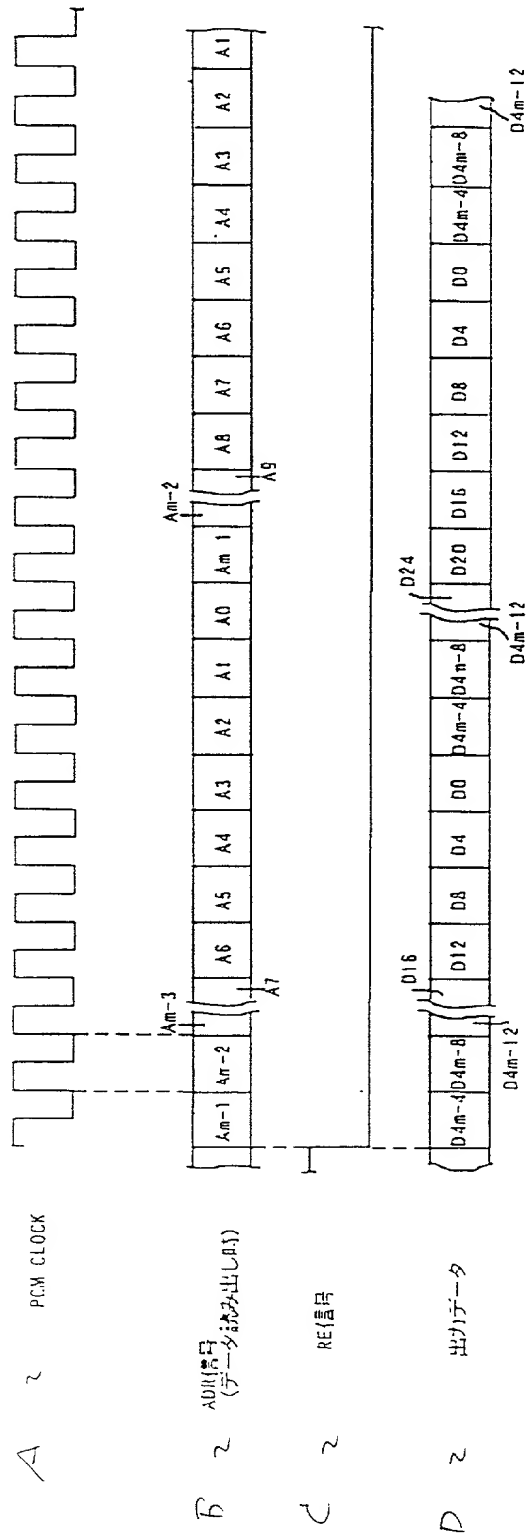
Fig 6





【図 7】

Fig. 7



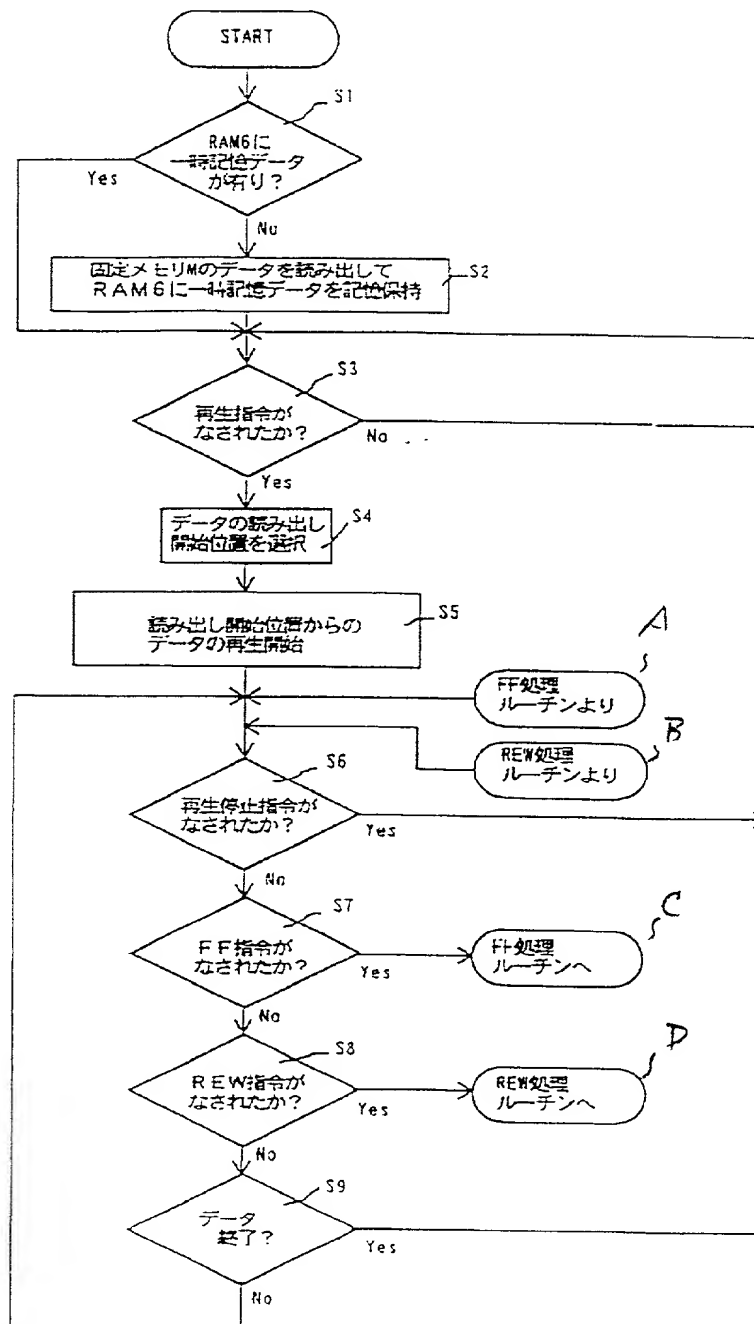
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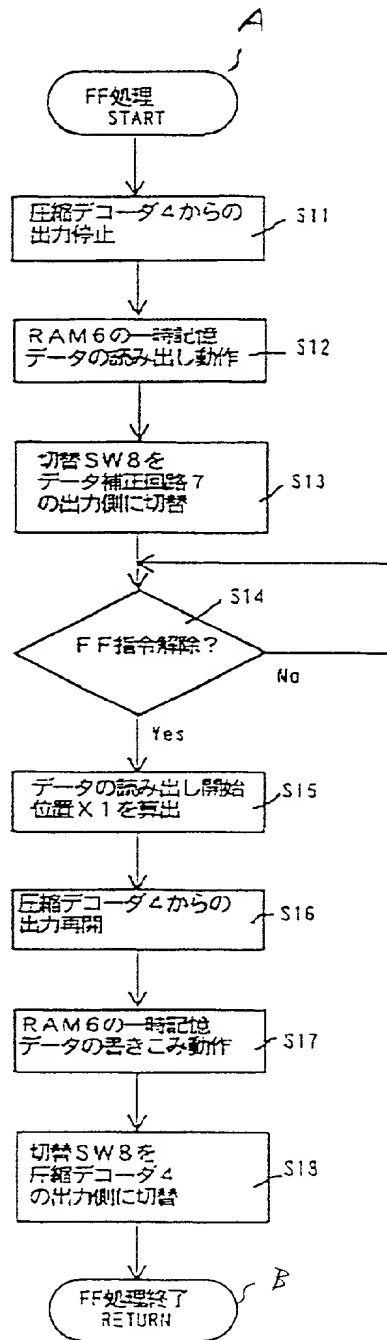
[図8]

Fig. 8



【図9】

Fig. 9



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~~整理番号=54P052~~~~【図10】~~

Fig. 10

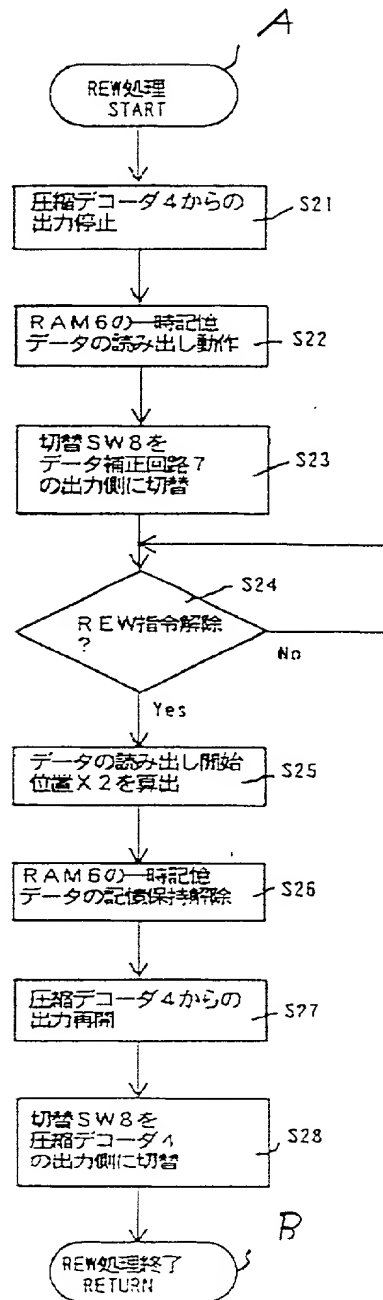
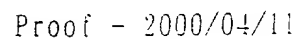


Fig. 11



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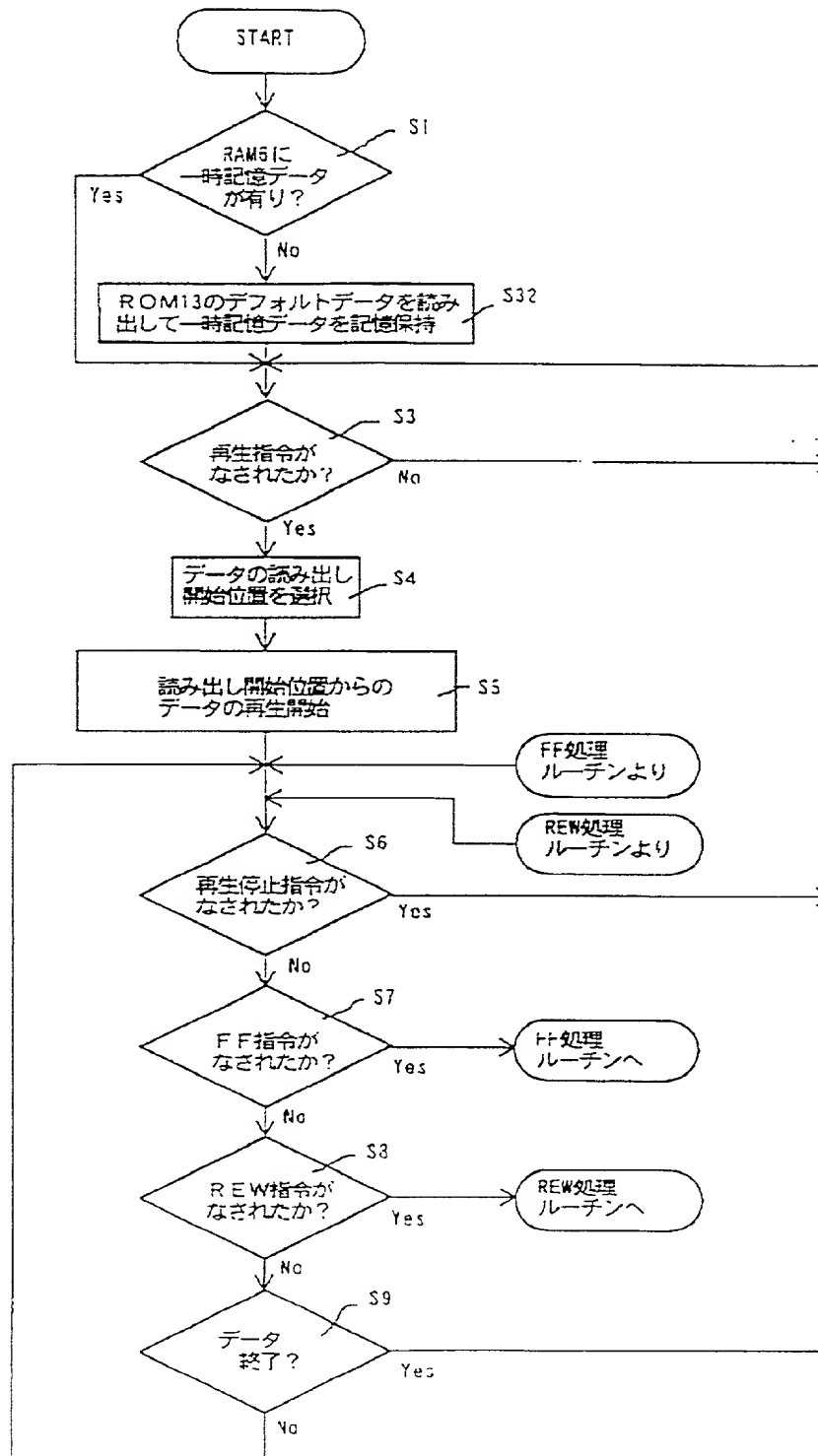
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{図 12}

Fig. 12



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Fig. 13

